

Name: _____

Date: _____

FOIL when $A \neq 1$ solution (version 0)

FOIL the expressions shown below:

1. $(-6x - 3)(7x + 2)$

$$\begin{aligned} &(-6)(7)x^2 + (-6)(2)x + (-3)(7)x + (-3)(2) \\ &(-42)x^2 + (-12)x + (-21)x + (-6) \\ &-42x^2 - 33x - 6 \end{aligned}$$

2. $(4x - 8)(7x + 4)$

$$\begin{aligned} &(4)(7)x^2 + (4)(4)x + (-8)(7)x + (-8)(4) \\ &(28)x^2 + (16)x + (-56)x + (-32) \\ &28x^2 - 40x - 32 \end{aligned}$$

3. $(3x - 4)(7x + 3)$

$$\begin{aligned} &(3)(7)x^2 + (3)(3)x + (-4)(7)x + (-4)(3) \\ &(21)x^2 + (9)x + (-28)x + (-12) \\ &21x^2 - 19x - 12 \end{aligned}$$

4. $(-5x + 7)(2x + 2)$

$$\begin{aligned} &(-5)(2)x^2 + (-5)(2)x + (7)(2)x + (7)(2) \\ &(-10)x^2 + (-10)x + (14)x + (14) \\ &-10x^2 + 4x + 14 \end{aligned}$$

5. $(2x + 7)(5x + 8)$

$$\begin{aligned} &(2)(5)x^2 + (2)(8)x + (7)(5)x + (7)(8) \\ &(10)x^2 + (16)x + (35)x + (56) \\ &10x^2 + 51x + 56 \end{aligned}$$

FOIL the expressions shown below:

6. $(8x - 4)(3x - 6)$

$$\begin{aligned}(8)(3)x^2 + (8)(-6)x + (-4)(3)x + (-4)(-6) \\ (24)x^2 + (-48)x + (-12)x + (24) \\ 24x^2 - 60x + 24\end{aligned}$$

7. $(2x - 4)(-2x - 3)$

$$\begin{aligned}(2)(-2)x^2 + (2)(-3)x + (-4)(-2)x + (-4)(-3) \\ (-4)x^2 + (-6)x + (8)x + (12) \\ -4x^2 + 2x + 12\end{aligned}$$

8. $(-4x + 3)(-3x - 7)$

$$\begin{aligned}(-4)(-3)x^2 + (-4)(-7)x + (3)(-3)x + (3)(-7) \\ (12)x^2 + (28)x + (-9)x + (-21) \\ 12x^2 + 19x - 21\end{aligned}$$

9. $(-8x + 7)(6x - 8)$

$$\begin{aligned}(-8)(6)x^2 + (-8)(-8)x + (7)(6)x + (7)(-8) \\ (-48)x^2 + (64)x + (42)x + (-56) \\ -48x^2 + 106x - 56\end{aligned}$$

10. $(-4x - 2)(-7x - 7)$

$$\begin{aligned}(-4)(-7)x^2 + (-4)(-7)x + (-2)(-7)x + (-2)(-7) \\ (28)x^2 + (28)x + (14)x + (14) \\ 28x^2 + 42x + 14\end{aligned}$$